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ABSTRACT

Novel crystal gels and articles are formed from one or more copolymers having at least one crystalline poly(ethylene) components and high levels of one or more plasticizers, said crystal gels having an amount of crystallinity, glassy components, and selected plasticizers sufficient to achieve improvements in one or more physical properties including improved crack propagation resistance, improved tear resistance, improved resistance to fatigue, resistance to catastrophic failure, and exhibiting high strain under elongations not obtainable in amorphous gels which high strain making the gel suitable for use as film layers for artificial muscles.